## EPA Incorporation of Five Tribes Technical Comments submitted February 2, 2018 Pre-RD Group Quality Assurance Project Plan (QAPP) dated January 18, 2018 Portland Harbor Superfund Site

	Comment	How incorporated in EPA comments	
	Broad Recommendations		
We suggest that EPA conduct the following checks of this FSP:		EPA has checked the FSPs against the list of required FSP components.	
t in v r in ( in c c c f f f	Section 5.7 (c) (2) on page 10 of Appendix A, Statement of Work, of the AOC says:  "The sampling will provide up-to-date information on the extent of contamination in affected media, identify existing conditions, and include a statistically valid data set that could be used to evaluate ROD remedial action objectives (RAOs). The FSP must include:  (2) Description of data collection parameters, including existing and proposed monitoring devices and locations, analytical parameters to be assessed, analytical methods employed, supporting rationale for the sample components and their relationship to ROD RAOs, metrics, and targets (fish tissue);"  The FSP should be systematically checked against this list of required FSP components.		
k s a a	The information included in this Pre-RD FSP should be checked against the information in FSPs from RI sampling to ensure that this FSP proposes consistent activities, as appropriate. For example, laboratories audits are described in the RI FSPs but not in this Pre-RD FSP.	EPA is checking the FSPs under review for consistency with previous RI sampling plans. Regarding the example provided in the comment, the quality assurance project plan (QAPP) under review does state that laboratory audits will be performed.	
	QAPP Specific Comments		
i o	As noted in the Introduction, our comments on the QAPP can be found in Attachment A. The comments are embedded in the pdf and flag issues and noonsistencies that should be corrected. The bulk of our comments can be summarized as follows:	The comment summaries will be incorporated into EPA's comments.  Comments that mirror EPA's comments will not be included in the list of comments to avoid duplicate responses.  A rationale is included in this table explaining why the comments were excluded.	
# # 4	Crosswalk Table. Per the Unified Federal Program #22, Field Equipment, Section 4.7, is listed in the AECOM/Geosyntec QAPP column. However, Section 4.7 appears to discuss laboratory equipment rather than field equipment.	EPA included this comment, as written, as Matters of Style comment #1.	
	Tables 2a and 2b. PCB46 MDL is greater than the PQL. Can a lower MDL be achieved? If not, what are	EPA included this comment as Primary comment #22.	

dissolved solids analysis is 2540 <u>C</u> .  TBC comment #17.  EPA included this comment, as written, as are both numbered "3" The first of these footnotes should be numbered "2".	Comment		How incorporated in EPA comments	
dissolved solids analysis is 2540C.  5. Table 2e. Two footnotes at the bottom of the table are both numbered "2".  6. Table 5. There are inconsistencies regarding stated preservation temperatures, TDS method number, and other minor issues:  a) The 1600 series methods indicate samples should be collected in amber glass bottles/jars (XAD-2 columns excluded) and stored in the dark.  b) Method 1613B (for dioxins/furans – sediments and particulate fraction for high -volume surface water samples) states that samples are to be frozen upon receipt at the laboratory and maintained in the dark at < -10 ° C until prepared.  c) Method 160.3 (Total Solids/Sediments) indicates that the samples should be cooled to < 4 ° C.  d) No method is listed for lipid determination for fish tissue samples. Lipids determination is performed as part of the extraction process. The Laboratory SOP that is used for the extraction of fish tissue could be listed here.  e) For the metals in surface waters, method 6020A is listed as an analysis method for metals for the surface water in table 5, while method 6020B is listed in table 2c for the surface water.  f) The correct method for total dissolved solids is SM2540C. See method reference also on Table 7  g) Method 2540C and 2540D (TDS & TSS) indicate that the samples should be stored at 4 ° C. it is  ePA included this comment, as written, as TBC comment #20d.  fight the provided this comment, as written, as TBC comment #20d.  f) EPA included this comment, as written, as TBC comment #20d.  f) EPA included this comment, as written, as TBC comment #20d.  g) EPA included this comment, as written, as TBC comment #20d.  g) EPA included this comment, as written, as TBC comment #20d.		•		
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7.	Section 3.3.3 including Tables 2a-e. Language should be clarified regarding whether all accuracy and precision values are for informational purposes only, and current lab limits will be used for data validation. Tables 2a-e should clarify which laboratory information specifically is presented for informational purposes only.  Suggested Clarifications: "If all accuracy and precision values listed in Tables 2a-e are presented for informational purposes only (and current lab limits should be used for data validation), then add this information to the last bullet in Section 3.3.3.	EPA included this comment, as written, as TBC comment #3.
	For the note at the bottom of each table, specify which laboratory information is presented for information. For example:  "Accuracy and precision values, as well as MDLs, were provided by the laboratory. These values are presented for informational purposes only. Data	
	review/validation will be based on the most current laboratory control limits in effect at the time of analysis."	
8.	Section 6.3. The level of validation should be clarified.	EPA included this comment as TBC comment #15.
	Suggested clarification: Replace "A Stage 4 Validation" with "A full validation Stage 4 or EPA Stage 3, depending on the method. (There are two instances.) Suggest replacing "Stage 2A" with "EPA Stage 2A".	
	The hierarchy of data validation guidelines documents should be clarified. It should be clarified if there is a hierarchy of which validation guidance documents use for validation (i.e. EPA National Functional Guidelines (NFGs) to be used first and then Regional guidelines if not covered in NFGs and if only Region 10 guidance should be applicable because the project is in Region 10.	
9.	Section 6.5 A clarification is suggested: replace "a Level 2 Data Package and a Level 4 Data Package"	EPA included this comment, as written, as TBC comment #16.

Comment

**How incorporated in EPA comments** 

Comment	How incorporated in EPA comments
with an EPA Level 2 Data Package and an EPA level 4 Data Package".	
10. Figure 2 is not labeled "Figure 2". On Figure 2, should the "Pre-RD AOC Group" members be listed in the box?	EPA included this comment as Primary comment #25.